

Title (en)
CAPACITIVE COMPENSATION FOR VERTICAL INTERCONNECT ACCESSES

Title (de)
KAPAZITIVE KOMPENSATION FÜR VERTIKALE VERBINDUNGSZUGÄNGE

Title (fr)
COMPENSATION CAPACITIVE POUR ACCÈS D'INTERCONNEXION VERTICAUX

Publication
EP 4233497 A1 20230830 (EN)

Application
EP 21883507 A 20210924

Priority
• US 202017078471 A 20201023
• US 2021051948 W 20210924

Abstract (en)
[origin: US2022132663A1] Multiple designs for a multi-layer circuit may be simulated to determine impedance profiles of each design, allowing a circuit designer to select a design based on the impedance profiles. One feature that can be modified is the structure surrounding the barrels of a differential VIA on layers that are not connected to the differential VIA. Specifically, one antipad can be used that surrounds both barrels or two antipads can be used, with one antipad for each barrel. Additionally, the size of the antipad or antipads can be modified. These modifications affect the impedance of the differential VIA. Additionally, a conductive region may be placed that connects to the VIA barrel even though the circuit on the layer does not connect to the VIA. This unused pad, surrounded by a non-conductive region, also affects the impedance of the differential VIA.

IPC 8 full level
H05K 1/11 (2006.01); **H01R 12/51** (2011.01); **H01R 12/52** (2011.01)

CPC (source: EP US)
G01R 27/16 (2013.01 - US); **H05K 1/0222** (2013.01 - EP); **H05K 1/0245** (2013.01 - US); **H05K 1/0251** (2013.01 - EP US); **H05K 1/0298** (2013.01 - US); **H05K 1/115** (2013.01 - US); **H05K 1/116** (2013.01 - EP US); **H05K 3/0002** (2013.01 - US); **H05K 3/046** (2013.01 - US); **H05K 3/4038** (2013.01 - US); **H05K 3/429** (2013.01 - US); **H05K 3/46** (2013.01 - US); **H05K 1/0221** (2013.01 - EP); **H05K 1/0245** (2013.01 - EP); **H05K 1/112** (2013.01 - EP); **H05K 3/4038** (2013.01 - EP); **H05K 3/429** (2013.01 - EP); **H05K 3/4602** (2013.01 - EP); **H05K 3/4611** (2013.01 - EP); **H05K 2201/094** (2013.01 - EP); **H05K 2201/09427** (2013.01 - EP); **H05K 2201/09454** (2013.01 - EP); **H05K 2201/096** (2013.01 - EP); **H05K 2201/09636** (2013.01 - EP); **H05K 2203/16** (2013.01 - US); **Y10T 29/49165** (2015.01 - US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
US 11324119 B1 20220503; **US 2022132663 A1 20220428**; CN 116670938 A 20230829; EP 4233497 A1 20230830; US 2022201857 A1 20220623; WO 2022086671 A1 20220428

DOCDB simple family (application)
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